

***The Second
ORNL Neutron Science Day***

**Friday, October 8, 2004
1-3 pm
Wigner Auditorium, 4500N**

ORNL's goal is to become the world's foremost center for neutron scattering. The collocation of at Oak Ridge of the world's most powerful spallation source and a world-class research reactor present an unparalleled opportunity for research involving neutron scattering. The upgraded High Flux Isotope Reactor (HFIR) will provide some of the world's most intense steady-state neutron beams, and the Spallation Neutron Source will become the world's most powerful pulsed neutron scattering facility.

This event, the Second Neutron Science Day will describe research opportunities in physical, chemical, materials, and biological sciences and engineering using neutron scattering. Neutron scattering has broad and growing applications across virtually all disciplines. The R&D capabilities discussed are intended to help ORNL staff connect with colleagues at HFIR and SNS.

For additional information, please visit the Spallation Neutron Source web site at <http://www.sns.gov>. All of the presentations will be made available in .pdf format on the SNS web site following this event. The Program is free, no registration is needed.

Tours of ORNL's neutron scattering facilities will also be available. On October 4-7, Monday-Thursday, an ORNL bus will depart the 4500N Flagpole Lobby at 2pm for a tour of the SNS, and return by 3:15pm. On Friday, October 8, immediately after the Program (about 3pm), separate buses will depart for tours of HFIR and SNS, and return about 4:15pm.

Program Agenda

- 1:00 pm ORNL's Neutron Science Future: Integrating Neutron Scattering Across the Laboratory**
Jim Roberto, Associate ORNL Director, Physical Sciences
- 1:20 Upgraded Instrumentation at HFIR and Future Science Opportunities**
Herb Mook, Condensed Matter Sciences Division
- 1:40 Science Opportunities on Early SNS Instruments**
Ken Herwig, SNS Experimental Facilities Division
- 2:00 A Brief Review of Theory for Strongly Correlated Systems: How Neutrons Can Help Theorists**
Elbio Dagotto, Condensed Matter Sciences Division
- 2:20 Innovative Science at European Neutron Scattering Facilities**
Colin Carlile, Director, Institut Laue-Langevin, Grenoble
- 2:40 Questions**
Thom Mason, Associate ORNL Director, SNS
- 3:00 Bus Tours of SNS and HFIR**